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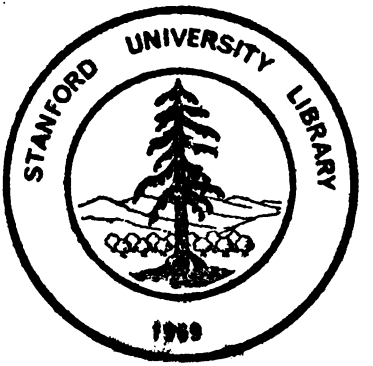

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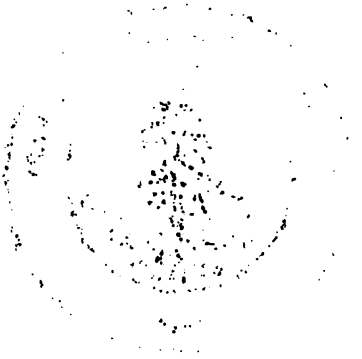

WEIGHT AND RELAXATION METHOD FOR THE PIANOFORTE

JACOB EISENBERG

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New York City

To My Mother

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PREFACE

In writing this volume, the foremost purpose in my mind was to provide, for the student of average ability, a book of reference containing a systematic exposition of the principles of WEIGHT AND RELAXATION playing. I have always believed that the needs of the average student of pianoforte playing are simplicity, clearness, and conciseness in all explanations, with a liberal use of illustrations, especially in explaining difficult problems.

In consummating this idea, I have always kept before me an imaginary child of about fourteen years and of average intelligence. As I wrote I imagined I was talking to him. So to make him understand I felt the necessity of avoiding the use of technical phrases wherever possible and to speak in simple language. In formulating rules, I was always careful to be guided by natural laws in preference to man-made rules.

In writing this work, I have prepared a book of Weight and Relaxation Exercises entitled "ETUDES FOR THE DEVELOPMENT OF THE PRINCIPLES OF WEIGHT AND RELAXATION PLAYING FOR THE PIANOFORTE," to be used as a companion or practice book in putting into actual use the theories propounded in this volume.

I hope these volumes will benefit those for whom they are intended, and lead them to work with a new spirit which comes through interest and through positive knowledge of the mechanical details in piano playing.

I wish to express my appreciation to Mr. Samuel Baker and Mr. and Mrs. Morris Pulver, for their many inspiring thoughts; Mr. and Mrs. Maurice Lichtmann, for their pianistic suggestions; my sister Meril, who posed for many of the illustrations, and to Mr. I. Dushman, for his painstaking efforts in preparing the photographic prints.

JACOB EISENBERG

New York City,
April, 1922

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CHAPTER I.

SUPERIORITY OF CONSCIOUS KNOWLEDGE

1. Popularity of Piano.

The piano, without a doubt, is the most popular musical instrument in America. This is evidenced by the fact that there is hardly a home in which one cannot find a piano. Indeed, it has so endeared itself to the hearts of the people, that a home is rarely considered complete without one.

Everybody seems eager to learn to play the piano. Countless numbers are spending considerable time and energy in trying to master this king of instruments. With this insatiable desire prevalent, thousands of schools of music have come into being and innumerable pianists have taken to teaching as a profession. Each teacher, working conscientiously, does all in his power to increase the playing abilities of his pupils.

2. Scarcity of Successful Pianists.

Yet how many become efficient performers? When asked to play something the average student will invariably find some excuse for refusing to accede to the request. It is only the exceptional student who is *prepared* to play and *can* play. There is, then, no question of a doubt but that very few students advance far enough to be able to play a composition through sufficiently well to satisfy even themselves.

If something is worth studying at all, it positively must be worth learning well. Then why is it that so few learn to play well? Since the average student starts out with an ample desire to learn, there must be some reason for this laxness in the study of piano playing. If we could determine these reasons or causes, we would be able to find a means of eradicating this apparent evil.

3. Reasons for Apathy Toward Piano Study.

Through his experience in teaching children, the writer has found many reasons for their apathy toward the study of piano playing. And what is true among children he has found equally true among mature students. In enumerating them, we should not be satisfied with merely pointing out the various causes, but we should analyze and so thoroughly understand them that we could, in simple terms, indicate the cure so that all may understand the faults and know how to overcome them.

The foremost cause for so many disappointments among aspiring piano students may be attributed to

lack of positive or conscious knowledge of the mechanical details in piano playing. **All others are related causes** and lead directly to it. In enumerating the various causes, we have:

I. *Lack of positive or conscious knowledge of the mechanical details in piano playing,* which is brought about by:
   (a) Faulty instruction,
   (b) Incorrect practice methods.

II. *Lack or absence of progress,* which impedes and represses:
   (a) Interest in studies,
   (b) Pleasure in practice,
   (c) Intuitive or subconscious appreciation,
   (d) Positive or conscious knowledge and appreciation,
   (e) Power, or ability to concentrate,
   (f) The absence of any or all of the above enumerated five qualities in turn help to impede and repress progress.

In reviewing the above list we find lack of positive or conscious knoweldge of the mechanical details in piano playing at the root of all evil. This fault is intensified for the most part by faulty instruction. How can one expect a young student to possess an extensive knowledge of how to do things properly unless he has had efficient instruction? And unless the student is conscious of every

movement to be made and knows exactly how to execute it, how can he be expected to practice properly?

Then, beginning with lack of progress, we have a complete cycle—beginning with lack of progress and ending with lack of progress—each phase pointing in the same direction. In other words, when a student realizes that he is not making progress, his interest in his work begins to wane. It is this loss of interest that is responsible for his failure to enjoy his practice period.

On the other hand, love for one's work awakens greater, though intuitive, appreciation that may have been dormant. The increased power of appreciation spurs the student on to a deeper study of the theoretical construction of the composition. This in turn causes him to acquire a positive knowledge and appreciation of the subject, instead of being satisfied with merely an intuitive understanding and appreciation. Without interest, pleasure in practice, intuitive understanding and appreciation, and positive knowledge and appreciation, there can be little power or ability to concentrate. Thus the greatest force that leads to the greatest amount of progress is left undeveloped.

4. Talented Students Are Exceptions.

Of course, there are exceptional students who are talented and insist upon doing things naturally correct, in spite of any method of instruction. Their intuitive ability or subconscious minds are so strong that they do not permit the student to play in any but the natural and correct way. Students of this

type make progress even under the most unfavorable conditions. However, we are not all so fortunately gifted with natural ability. We must be content with the ability at our disposal and *there is no limit to the progress one can make with that ability if he only applies it properly.*

5. Superiority of Conscious Knowledge.

A conscious knowledge brought about by persistent application of one's abilities along proper lines is far superior to the best subconscious abilities. But, *both working together and in harmony* is conducive to supreme results. That is, when a talented student is made conscious of every movement of the arm and body, and of every technical detail, the greatest results can be expected.

When the average mature person works on a proposition and after much labor discovers that he does not make appreciable progress, he begins to lose interest in his work. And with lost interest, he finds himself lagging behind further and further until the very sight or even the thought of his work becomes repugnant to him. Unless a more proficient worker happens along and puts him on the right track and causes him to have a change of heart toward his work, he abandons it and tries his luck in some other field of endeavor.

So it is with children in the study of piano. When the ordinary student through lack of positive knowledge of the mechanical details in piano playing, or any other cause, finds himself backward in his work and his

progress is very slow, he loses heart and gives up his studies at the piano. That is, if he can have his own way about it. It is only the child more fortunately situated, or gifted with more perseverance and determination, who succeeds.

6. Instruction in Most Cases Is Faulty.

That there is something radically wrong with the method of instruction followed by most piano instructors is evident from the large number of deserters from the ranks of piano students. Some change must be made in the method of instruction in order to alter this condition of affairs.

Take the industries as an example. The business that is most successful today is that one in which the employes are taken into the confidences of their employers, and where the work is explained in an interesting, clear and concise manner. Thus, the men fully understanding the significance of their tasks, enjoy their labors more and in that way attain better results with less painful efforts.

If successful business men have found it to their advantage to prevail upon their employes to take a personal interest and pride in their work, why not use the same tactics in training children in the performance of their assigned tasks. The young student's mind must be nurtured and trained in the same manner as the mind

of a more mature person. The work should be made interesting for them, and *interest comes through knowledge.*

7. Activity of Child's Brain.

We must realize that though children are young in years, they must be given credit for having a certain amount of common sense and reasoning power, which can be appealed to. Their brains are very active, but unfortunately, with the average student, the brain is active in the wrong direction—the direction which is quite universal. That is, they use their brains to find means of avoiding assigned tasks. When they are young, their more mature friends find many reasons—more or less plausible—for excusing them, and in that way permit them to develop traits that in later life are condemned.

8. Summary of Reasons for Apathy Toward the Piano.

In summarizing, then, we find that though there are many causes for the vast number of failures among aspiring piano students, they all lead directly to the one great cause, a lack of positive knowledge of the mechanical details in piano playing, which shunts and naturally diverts and retards progress—the greatest stimulant for inducing and promoting still further progress. Now that we realize where the fault is, we can find the means

of eradicating the evil. And that means is to explain the method of playing so completely and in such simple terms that all may be able to understand them.

9. Means of Promoting Progress.

The instructor's task, then, is to impart the proper stimulus to the student and cause or bring about mental activity on the part of the student in the right direction.

He should arouse in the student a compelling force that will constantly stimulate progress. He should create an interest and general pleasure in the student's practice periods. All this can be done by:

(a) Making the student conscious of every natural movement of the body, arms, hands, and fingers.

(b) Assigning interesting music. Everybody likes to play beautiful music, and the aroused desire in the pupil to learn a certain composition is half the battle won. There are so many thousands of beautiful compositions, many of which the pupil *will* like—why pick on the one he does not care for?

(c) Arousing in the student an ambition to learn.

(d) Exciting the student's imagination.

(e) Meeting the student on the same congenial ground. Make him feel that two friends are working for a common good, instead of a master driving him on regardless of his feelings or likes and dislikes.

POSITIVE or
CONSCIOUS
KNOWLEDGE OF
THE MECHANICAL
DETAILS IN PIANO
PLAYING,
brought about by
PROPER
INSTRUCTION,
and
CORRECT PRACTICE
METHODS,
increases

PROGRESS.
Increased
progress
arouses

INTEREST.
Interest
promotes

PROGRESS and
PLEASURE IN
PRACTICE.
Pleasure in
practice

INDUCES FURTHER
PROGRESS,

and
DEVELOPS ABILITY
TO CONCENTRATE.

Concentration
enhances

PROGRESS,
and
INTUITIVE OR
SUBCONSCIOUS
APPRECIATION,
also
POSITIVE OR
CONSCIOUS
KNOWLEDGE
AND
APPRECIATION.

EACH
ALONE,
AND ALL
COMBINED
INDUCE
AND
PROMOTE
STILL
FURTHER
PROGRESS.

10. Qualities Essential to Success.

Piano playing is a very difficult art. It is hard enough to master when one works under ideal conditions. That is, when a student possesses the three qualities that are essential to success, which are *inspiration*, *aspiration*, and *perspiration*. All three are necessary, but the last one is the most essential. One can overcome the deficiency of the others through hard work. There is no substitute for the necessary hard work. It must be endured by all, but we can find the means that will enable us to enjoy the fruits of our labors. As a general rule, one is quite willing to work hard if he is reasonably sure of attaining good results, but so many work in the dark without any promise of success. That is what is so discouraging.

11. Average Present Method of Study Inadequate.

The instruction of the average student is conducted along certain general lines with little deviation from the regular course. The student takes his lesson and is asked by his teacher to prepare certain compositions and studies. The student tries to figure out what is meant by the composition itself and the teacher's meager explanations, and then practices in his own way. He takes his next lesson. If he shows that the work assigned was well prepared, he is given new material to work upon. If the assigned work was not well prepared he is usually given a scolding and told to go home and practice more.

12. Mechanical Part of Piano Playing Should Be Made Interesting.

Is there any wonder, then, that under such trying conditions the student soon becomes discouraged and loses interest in his studies? He should be taught what to do and how to do it. He should be made conscious of every movement of the hand and body. He should be taught every technical detail, and when he has acquired the necessary technical skill, it will not be so difficult for him to master the interpretation of the composition. Only a developed body can respond to the demands made upon it by a strong mind.

The mechanical part of piano playing should be made as interesting and simple as possible. One can obtain far better results if he only works along proper lines and in a systematic way. That is the purpose of this work—not to imbue one with *inspiration* or *aspiration,* but to make *perspiration* as light as possible.

Chapter II.

IMPORTANCE OF CORRECT POSITION

13. Economy of Effort Important.

Of course it is quite easy to say work along proper lines and in a systematic way, but how is that to be accomplished?

As a general rule, in piano playing, one works harder than is necessary to get the results usually obtained. The performer makes too many unnecessary motions in his playing. If every unnecessary motion and every unnecessary strain could be eliminated, the energy and time consumed in that way could be used to better advantage. It should therefore be every student's aim to eliminate as many unnecessary motions as possible and to do everything in his power to make the mechanical part of his playing simple.

"What motions in piano playing are unnecessary then?" is the first question that arises. The question is short, but the answer must of necessity be long.

14. Purpose in Analyzing Body Position.

The best method to pursue in answering this question is to study and analyze body and hand position, arm movements, and finger action. Then, knowing all the movements, we can eliminate the unnecessary ones, and substitute simpler and more graceful movements for difficult and complex movements. In this way we can arrive at the solution of the problem of correct position.

15. Correct or Natural Position Indispensable.

We have heard much about correct position. Much has been said about proper body position and proper hand position. The impression we usually get is that we study position for position's sake, or in order that we should not be criticised for assuming a position which some people consider incorrect. This false notion about reasons for considering any position in piano playing to be correct or incorrect, has led to the assumption of awkward and ludicrous positions, much to the detriment of the would-be artist.

If one were to walk on the street with his shoulders raised and turned toward the front, elbows touching the body, hands crossing; and if his fingers were curled as in Fig. 1, or held straight and stiff as in Fig. 2, what impression would he make upon you? Wouldn't you say, "How pitiful! So young and yet crippled or paralyzed!" Still, when the same man sits at a piano displaying the same abnormal body and hand position as in Fig. 3, you think nothing of it. In fact, often it is considered correct.

Fig. 1 Fig. 2

But why should a position look awkward, unsightly, and even ludicrous or pitiful, and still be considered correct when assumed at the piano? It is just as incorrect in the one case as it is in the other. Position should be studied from the point of view of results. In other words, *that position is correct which gives or helps one*

Fig. 3

to attain the maximum of results with a minimum of effort. All effort should, therefore, be exerted to determine that position and to explain it in such simple terms that anyone may understand it and know how to apply it in practice.

16. Method of Determining Correct or Natural Position

Where can one find his source of information in this matter? From nature, of course, for what is natural is simple, graceful, and correct; and from the artists themselves, since they play in a natural way. We must not ask the artists to explain their method, for in many cases they themselves do not know, exactly, the mechanical details of the methods they pursue.

The writer has often read articles written by artists explaning certain movements, and upon investigation he has found them to do something entirely different and sometimes exactly opposite to that which they explained. The artists themselves, then, are often unaware of how they arrived at their results. They were naturally correct in their playing movements and seldom had cause to pay any attention to the *how* and *why* in piano playing. They did not find it necessary to practice self-analysis and for that reason do not recognize the processes of their own acts, both mental and physical. We must, therefore, not ask them to explain, but instead make a thorough analysis of their natural playing movements.

17. Great Artists Get Maximum Results with Minimum Effort.

The greater the artist the less energy he seems to expend in getting his wonderful results. When one witnesses the performance of a truly great artist, he is not enchanted by his vigorous and fantastic body movements but by the digital dexterity displayed. His body and

hands are held in a natural position and he uses his fingers in such a way that he gets a maximum of results with a minimum of effort.

18. Development of Natural Playing Is the Goal.

In studying and analyzing the natural playing position in order to point out the position which gives the best results, it is best to begin at the source and point out where effort begins and where body movement begins; and then in a logical order we must pass on to the results aimed at. Then, knowing what to do and how to do it, *we should develop our playing muscles to work consciously in the proper and natural way and to continue that development to such a high degree of perfection that they will work correctly even without conscious effort.*

CHAPTER III.

RELAXATION

19. Purpose in Analyzing Muscular Action.

Since every arm or finger movement is the result of muscular action, we must determine upon the method of employing our muscles that is conducive to the best results with the least effort. To find that method, it is necessary to analyze muscular action and point out where effort begins and in a logical order pass on to achieve the results we desire.

20. The Mind Must Be Trained for Correct Muscular Action.

Of course, the first action takes place in the mind. It is in the mind's workshop where everything begins and everything ends. It is the mind that tells us what to do, and it is the mind that judges our action and tells us whether or not we are right.

Now, that we realize that it is the mind that tells us what to do, our first task is to train and educate the mind to do the right thing at the right time. When a muscular action is contemplated, the desire or necessity for action is first conveyed to the mind through some outside force such as a verbal request or printed music. This request is passed on by the mind with instructions as to which muscles should be used and how they should act. If the mind has been trained for correct muscular action, it will pass the order on to the muscles to act in the natural or proper way. If, however, the mind has been trained to employ the muscles in an incorrect way, there will, of course, be faulty muscular action which must be avoided.

21. The Mind Can Be Trained.

We must remember that the mind is impressionable. That is, it believes everything it is told and retains that belief until some outside force in the form of experience proves the first impression wrong. A child readily believes in fairies and Santa Claus. It continues to believe these fantastic myths until it finds them untrue and then his attitude toward them changes immediately. More mature people believe in other things, and when experience proves them false, they change their minds.

22. Learning Correctly Is Advantageous.

He who correctly comprehends a principle from the start, makes much more rapid progress than he who finds himself following wrong precepts. Changing from one method to another is a terrible waste of time and

energy as well as a destroyer of great ambitions. However, it is better to gain a positive or conscious knowledge of the mechanical details in piano playing, and learn to work along the right lines and in the proper way, even at a later date than to continue following the method that does not give promise of success. So let us analyze muscular action in such a manner that the mind will dispel all illogical and incorrect methods of procedure and strengthen its hold upon the correct method. This hold can only be strengthened by a positive knowledge and absolute confidence in that knowledge.

23. Muscular Co-ordination Is Necessary.

In analyzing muscular action, in so far as piano playing is concerned, we find that it can be divided into three parts or divisions. Each of these divisions of muscular action is distinct in itself, but when working in harmony with the others, achieves the maximum of results with a minimum of effort. Each division, however, can NOT function perfectly and still be isolated. That is, each division of muscular action, to get the best results, calls upon the other two divisions for help.

A glance at Figs. 4 and 5 will suffice to convey the impression that all the muscles overlap and make co-ordination among them necessary for their most efficient and graceful functioning in playing the piano.

24. Divisions of Muscular Action.

The three divisions of muscular action are:

(a) That muscular action which causes the whole arm to move. These muscles extend from the

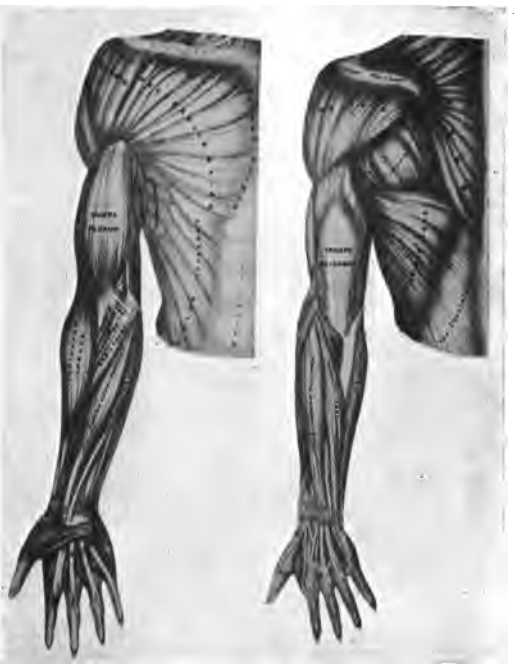

Fig. 4 Fig. 5

shoulder and the body and join the arm in the upper-arm (Figs. 4 and 5).

(b) That muscular action which causes the forearm to move. These muscles extend from the shoulder joint to the elbow joint of the forearm, as shown in Figs. 4 and 5.

(c) That muscular action which causes the fingers to move. The muscles that raise and lower the fingers extend from the elbow joint of the forearm, narrow down to tendons, pass through the wrist, and join with the fingers at the second joint. The muscles that separate the fingers and draw them together again are in the hand. See Figs. 4 and 5.

25. Principle of Muscular Action.

Figs. 6 and 7 illustrate the muscular action that takes place in the movement of any part of the body. Since there must be two opposing sets of muscles to cause any movement, let us assume that in Figs. 6 and 7:

(a) A, B, C is the arm; then
(b) B will be the elbow joint,
(c) Flexor muscle will be biceps flexor as in Fig. 4,
(d) Extensor muscle will be triceps extensor muscle as in Fig. 5.

Having assumed a, b, c, and d we find in Fig. 6, the arm in a normal, or natural position, neither muscle is under even the slightest strain. In Fig. 7 we find the arm bent at the elbow joint B. The action that caused this bending is the contraction of the flexor muscle (biceps flexor muscle in Fig. 4) and an expansion of the extensor muscle (triceps extensor muscle in Fig. 5). To straighten the arm again, there is a gradual change in the muscular movement, this time in the opposite direction to that which caused the bending of the arm at the elbow.

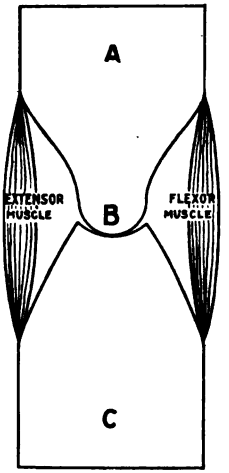

Fig. 6

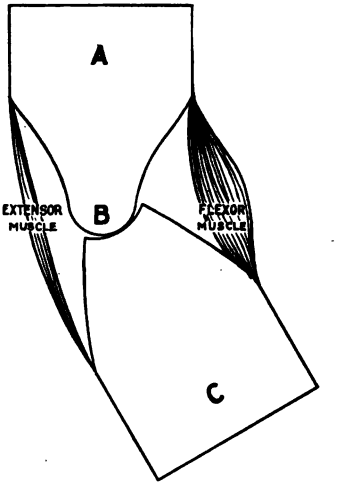

Fig. 7

26. Muscular Strain Must Be Avoided.

When one plays in a manner that isolates each division of muscular action, or when in a manner that causes one set of muscles to work against the others all the muscles are weakened and cause an avoidable muscular strain. This condition must always be avoided. There must be the strongest possible co-ordination among all three divisions of muscular action so that friction be reduced to a minimum.

27. Muscles Must Neither Be Too Relaxed Nor Too Firm.

No set of muscles must be permitted to stiffen or become too tense. Every playing muscle must always remain relaxed, but not so much as to be flabby. To

play with either stiffened muscular action or extremely relaxed muscular action would be a grievous fault, as neither method is conducive to the best results. *It is wisest then to follow the middle course, as either extreme would tend to change a splendid principle into a fault.*

It is impossible to play with absolute relaxation in every playing muscle. There must be a certain amount of tenseness. This tenseness takes the form of firmness which should not be carried too far. Should one be too firm his muscles would gradually stiffen and stiffened playing muscles hamper the playing movements to so great an extent that they retard progress and often make playing painful.

28. Results of Muscular Co-ordination.

Since there is a decidedly strong co-ordination among all divisions of muscular action in correct piano playing, we must realize that the slightest movement of any finger causes *that* movement to be conveyed to every muscle. In other words, the whole body acts with each touch of any finger. For this reason the body and every muscle and joint in it must be supple to get the best results.

29. Ease and Grace in Muscular Movements Are Essential.

Development of ease and grace in all muscular movements will bring about relaxed playing. Understanding the muscular action that takes place with each movement of the arm or fingers, one can readily see that curling the fingers as in Fig. 1 or holding them out

straight as in Fig. 2, or curling the fingers and bending the wrist at the same time as in Fig. 3, means strained muscles. In these figures every flexor and extensor muscle is in an abnormal condition and, therefore, under an unnecessary and avoidable strain as is shown in Fig. 7. This condition in piano playing must be avoided to the greatest possible extent to get the best results. One would not hold his hands and fingers so while walking or in doing anything else, why assume such positions at the piano?

30. Avoidable Strain Must Be Eliminated.

Every avoidable muscular strain must be eliminated. The muscles must be free (without strain as in Fig. 6). When one, while walking, permits his arms to hang loosely at their sides with all the muscles in the arms and body relaxed as in Figs. 6 and 8 there is no muscular strain. If one can maintain the playing muscles in this normal condition when performing at the piano, he will avoid all unnecessary strain that is put upon them.

31. Purpose of Effort.

We have studied the route through which a musical thought passes from the printed music sheet to the tips of the fingers. We have explained and determined the muscular movements essential in playing the piano. Let us go further, and study and analyze the route of the musical thought to its final resting place,—the memories of the listening public.

We are not after method for method's sake but for results. So let us point out in simple terms that

method of applying this natural and therefore correct muscular action to make the tone produced by depressing the keys, pleasing to the ear.

32. Method, Weight and Relaxation.

The only method that can be employed to develop ease, grace, quantity and quality of tone, and sympathetic expression in piano playing, or in other words, extreme quantity of tone and sublimest quality of tone, is the WEIGHT AND RELAXATION METHOD. That is, *employ the weight of the arms for quantity and quality of tone and conserve energy to as great an extent as is possible by maintaining relaxed muscles.*

33. Weight Playing, Tone.

To achieve this result, all playing must come from the shoulders, including extreme pianissimo effects. The mind should so completely control the playing apparatus that it can make any demand upon the muscles and be confident that they will be fulfilled. It is entirely essential that the principle of weight playing with free-arm movement should be thoroughly developed, for it is only through these means that one can hope to acquire exquisite quality of tone together with extreme quantity of tone with a minimum of effort.

Without weight, the playing sounds thin and has little carrying power. The free-arm touch can be given with little effort and its mere weight produces a far more sonorous tone than could be produced by any degree of force.

CHAPTER IV.

POSITION

34. Advantages of Correct Position.

Correct position is a very important factor in piano playing. Many students wilfully neglect to master the correct position. They seem to feel that they are immune from that study. They are of the type that likes to play but is not overfond of careful study.

The writer cannot impress too strongly upon the student that mastery of the correct and natural position helps greatly toward the mastery of the whole keyboard. *For correct position in itself means, that position which gives or helps one attain the maximum results with a minimum of effort.*

Holding the shoulders, upper arm, forearm, hands and fingers as is outlined in this chapter (see Figs. 8 to 12) and employing these positions in playing the piano as in Fig. 13 is the only way to get the best results. To assume any other position would mean putting obstacles

in the way of progress before one even begins to play. It is the duty of every pianist to avoid or surmount every obstacle. But *it is easier, when one can find the means, to avoid the obstacles than to surmount them.*

Fig. 8

Fig. 9

35. Method of Arriving at Correct Position.

To arrive at the position in piano playing that is conducive to the best results:

(a) Take note of people while walking, as in Fig. 8, shoulders relaxed though firm, arms hanging loosely from the shoulders, with the arms and

fingers relaxed. Notice that in the natural walking position there is a space between the elbow and the body. Notice also that the arms do not hang perpendicularly from the shoulders, but slant outwardly from the body.

(b) Holding the arm at the side and without moving the upper arm either closer to, or away from the body, raise the forearm as in Fig. 9. Notice again the distance the elbow is away from the body. The upper arm looks as though it is held out and away from the body. The appearance is misleading, however, for the upper arm was held firmly in its hanging position, as shown in Fig. 8, when the forearm was raised.

36. Develop Conscious Effort to Employ Muscles in Natural Way.

There is, nevertheless, a natural tendency on the part of the arm to come closer to the body and out of its natural hanging position. To overcome this weakness or tendency, it is well purposely to hold the elbow out further away from the body as in Fig. 10. In time, the muscles that hold the arm in that position will be developed and neutralize the effect of the muscles that tend to draw the elbow closer to the body. Then the arm will remain in its natural hanging position. Great care should be exercised in keeping the shoulder muscles relaxed. Do not under any condition raise the shoulders when holding the elbow out. *Develop a conscious effort*

to employ the muscles in a natural way and continue this development to such a fine degree that the arms will be held out and away from the body in a relaxed and hanging position even without conscious effort.

Fig. 10

37. Wrists Must Be Supple and Natural.

Now let the forearm down, with the arms hanging loosely from the shoulders (the arms and fingers re-

Fig. 11

laxed) as in Fig. 11. Notice the curve of the outside of the hand at the wrist. Without changing the curve at the wrist, raise the forearm as in Fig. 12. Notice that the knuckles are just a trifle higher than the wrist. If it is natural and requires the least effort to hold one's

hand so, then why can we not apply the same position in playing the piano?

38. Finger Curve Must Be Natural.

Again let the forearm down as in Fig. 11. This time notice the curve of the fingers. They are arched and form the segment of a circle. This position of the fingers is natural, strongest and most free in which to

Fig. 12

hold and to use them. And nature does that without any effort on our part. Without changing the position of the fingers, raise the forearm at the elbow again as in Fig. 12. Notice again the roundness of the fingers. One's fingers when held natural are neither straight nor curled. In either case the fingers would be stiff and under an unnecessary strain.

39. Playing Comfort Essential.

We have studied and analyzed the natural positions of the body, hand and fingers. Now let us sit down at the piano and apply the same rules. There is no reason why we can not, or should not, be just as comfortable in playing the piano as when standing or walking.

40. The Chair Should Be Neither Too Close to Piano Nor Too High.

To be seated at the piano most comfortably and in a position that will be conducive to the greatest amount of free play in arm movement, as in Figs. 13 and 17, the following requirements are necessary:

(a) The chair or piano stool must not be kept too closely to the piano, causing the performer to be crowded. This is a very common fault. The player should sit far enough away from the piano to allow himself free play. That is, there should be enough space between himself and the piano to permit his arms to move freely in any direction with but the slightest effort and be able to reach any part of the keyboard with ease. In other words, the

Fig. 13

player should avoid sitting so far away from the piano that he would have to reach with outstretched arms for the keys or sitting so close to the keyboard that he should be cramped. Each student must satisfy his own individual demands in this respect. There is no set distance that can apply to all alike. The main thing to observe and demand is *playing comfort.* That is, the student should sit just far enough away from the keyboard that he will be allowed the greatest amount of free play and comfort while playing and will still be within easy reach of every part of the keyboard.

(b) The chair or piano stool must not be too high. Sitting too high is a very common fault. Each student must adjust the height of his chair to his own personal needs. But he should see to it that it has the necessary height to cause him to sit in such a position that will bring his forearm to almost a horizontal level with the keyboard. The elbow should be a trifle higher than the knuckles and wrist, as in Fig. 13.

41. Correct Body Position at Piano.

Having decided upon the height of the chair to be used and the distance from the piano to place it, let us consider the body position at the piano. The most important point to remember is to assume a body position that will mean maximum playing comfort and at the same time permit the performer to meet every demand

with a minimum of effort. To arrive at that position:

(a) The body should be firm though relaxed and leaning forward just a trifle so that the weight of the body will lean toward the piano, as in Fig. 13. One often sees performers sitting very high and leaning too far forward in order to have more power in their playing by utilizing the weight of the body. Sitting in this position is ungraceful and, of course, unnatural. Besides, such a position creates an impression that playing the piano is a painful task. (See Fig. 3.) It is not, if one assumes natural playing positions as in Fig. 13.

(b) When standing in a natural position, there is a bend in the arm at the elbow. It is the most convenient manner of holding the arms when playing the piano as in Fig. 13. When sitting at the piano, this bend is caused by keeping the elbows away from the body and in a natural hanging position. Keeping the elbows close to the body causes stiffness at the shoulders, elbows, hands and fingers. Such conditions must always be avoided.

(c) Keep both feet in touch with pedals so that they will be ready when needed, as in Fig. 13.

CHAPTER V.

FOURTH AND FIFTH FINGER DEVELOPMENT

42. 4th and 5th Fingers Are Weakest.

We have studied and analyzed body, arm, and hand positions which are most conducive to the best results in piano playing. Now let us study the fingers at the piano, learn all their weaknesses and faults, and then try to eradicate these faults and weaknesses.

Nature has decreed that the 4th and 5th fingers shall be the weakest of all the fingers, and all the practice in the world will not make them physically as strong as the others. That, however, is not necessary. But, it is essential that we strengthen them as much as possible and overcome their natural weakness.

43. Strength of Fingers Can Be Equalized.

The 4th and 5th fingers must be made capable of doing exactly the same work as the other fingers. They must be made capable of carrying along a sustained

melody while the other fingers of the hand are playing the accompaniment. This natural physical weakness must be overcome, and it can be overcome by a combination of two lines of attack.

44. First Line of Attack, Weight.

The first line of attack can best be explained by means of a problem in science from which we learn that weight has ability or capacity to perform work which is called *energy*. The energy which is possessed by weight depends upon the position of the body. This energy is measured in foot-pounds. It is equal to the product of the weight and the distance through which it is allowed to fall. In other words, if a ten-pound weight were lifted a distance of one foot and permitted to fall, it would generate energy which would be 10 pounds times 1 foot or 10 foot-pounds.

If that is true, then, if a one-pound weight were lifted ten feet and permitted to fall, the energy generated would be 1 pound times 10 feet or 10 foot-pounds. Thus the same effect can be produced by letting a ten-pound weight fall through a distance of one foot as by letting a one-pound weight fall through a distance of 10 feet.

It is true that ten pounds will never equal one pound and that one foot will never equal ten feet but *ten foot-pounds* will forever equal *ten foot-pounds*.

45. Method of Employing Weight in Equalizing Strength of Fingers.

Since it is results we are after, that method of doing things which brings about the best results in the shortest

time is the best and only method to pursue. As we have said before, we can not make the 4th and 5th fingers physically as strong as the others, but we can overcome their weakness.

Why can we not liken the thumb (the strongest finger) to the ten-pound weight of the above problem and the 5th finger (the weakest finger) to the one-pound weight, and then, according to the same problem, equalize their differences in weight by making the distances through which the fingers fall inversely proportional? That is, hold the strong finger near the key and the weak finger higher above the key as in Fig. 14. In this way the fingers can be equalized and all made capable of doing the same work.

46. Weight Playing Develops Clear Touch.

Besides, nothing else so develops clearness of touch, trains the muscles, and forms a background for good technic as raising the fingers. In raising the fingers one is always ready to strike the next key. There is only one motion for each key depression and that is the downward motion necessary to strike the particular key. The side motion is made while the finger is awaiting its turn to act.

If the fingers are permitted to lie low or remain resting indefinitely upon the keys, the finger must first be raised, then stretched, and finally struck. Raising the fingers and keeping them raised and ready for action eliminates two unnecessary motions. That is, the fingers prepare during their resting period for the next

Fig. 14

move. Simply raising the fingers is not enough. They must be made physically as strong and as independent as possible and capable of doing efficiently the work assigned to them.

47. Second Line of Attack, Physical Development.
The second line of attack is a combination of the

Fig. 15

first line or *theory of raised fingers* and special exercises to develop the strength of the 4th and 5th fingers. The writer has arranged two etudes for the development of these weak fingers. (See Weight and Relaxation Exercises by the writer.)

In practicing these etudes, carefully observe and see to it that:

(a) The fingers are raised and that the 4th and 5th fingers strike from a higher level than the others as in Figs. 14 and 15.

Fig. 16

(b) The fingers maintain their natural curve, as in Figs. 11 to 16.

(c) The fingers fall with the full weight of the arm upon the keys. This is consummated by combining with the finger action a slight arm movement, though the visible movement in striking the key and in raising the finger has taken place at the knuckles.

(d) The point of contact in finger fall is the ball of the finger as in Fig. 16.

(e) The hand should remain as quiet as possible.

(f) Each stroke is sharp, clear, and the tone even.

48. Practice All Important.

It is advisable to practice these etudes with decided accents first upon each note played by the 5th finger, and then upon each note played by the 4th finger. In this way, these much-neglected fingers will get the train-

ing that has been denied them. At first these fingers may not act properly, but what else can be expected of them? They have not been trained and are rough in their movements. Very little attention has been given them, so naturally they have remained weak. These etudes should be mastered and practiced daily. One should never neglect them. Strong 4th and 5th fingers are an absolute necessity for good performance.

49. Strong 4th and 5th Fingers Essential.

Give the 4th and 5th fingers the right kind of exercise and develop the muscles that control them, to such an extent, that:

(a) All the fingers will feel the same.

(b) When a melody is to be sustained by the 4th or 5th finger there will be the power in the muscles to sustain it.

(c) When any special emphasis or accent is to be produced by the 4th and 5th fingers, there will be the power in the muscles to produce it.

50. 1st, 2nd, and 3rd Fingers.

The writer has dwelt so largely upon the development of the 4th and 5th fingers because of their natural physical weakness and their natural tendency to shift responsibility to the other fingers. He has always felt that this weakness or tendency must be overcome and found that it can be overcome by assiduously following the rules propounded in this chapter.

For the same reason, the writer has found it advis-

able to omit much space that could have been devoted to the 1st, 2nd and 3rd fingers. These fingers are strong, more independent and more efficient, and will just naturally follow along in the development of the weaker fingers. The student will find that when the 4th and 5th fingers work correctly ALL the fingers will work correctly. That does not mean, however, that the first three fingers should be neglected. By no means should such a state of affairs be permitted. The student must always be careful of every action of each finger but most of the attention should be placed upon the weaker fingers as those are most apt to act incorrectly.

CHAPTER VI.

HAND POSITION

51. Natural Position the Goal.

We have studied and analyzed the body and hand positions beginning at the shoulder, then the arm, and the hand and fingers. We have concluded that that position is best and correct which is conducive to the best results with the least effort. We have learned that the best position is the natural position in which the muscular strain is reduced to a minimum. We have learned also that holding the fifth finger higher than the thumb equalizes the strength of the fingers. Now let us combine all the points and arrive at the complete correct and natural hand position at the piano as in Figs. 13 and 17.

Every student should make it one of his strongest points to arrive at the correct and natural position as

Fig. 17

soon as possible and not to lose courage until it is mastered. The writer has found it to the greatest advantage to utilize a series of exercises that are simple in themselves but pliable. He has found such exercises of extremely good value in developing the correct hand position as well as in developing strong and independent arms and fingers. He uses them extensively in his teaching

because they are very simple exercises that can be easily memorized. (See Etudes for the Development of the Principles of Weight and Relaxation Playing by the writer.) In practicing them one can devote all his time to watching the hand position, finger action, and arm movements.

One should continue watching his hand position, finger action and arm movements until he has acquired the habit of always playing correctly. In other words, one should acquire the mastery of correct position to such a high degree of perfection that he will employ that position even without conscious effort when playing any composition.

52. To Acquire Mastery of Correct Hand Position.

Practice the exercises in the key of *C Major,* as found in the writer's book of etudes. In practicing them, watch carefully the playing position of the hands and fingers. To acquire the mastery of the correct position:

(a) Play very slowly.

(b) Count aloud, allowing at least one beat for each note.

(c) Play very smoothly.

(d) Hold the 5th finger higher than the others, sloping the hand from the 5th finger to the thumb, as in Figs. 14 and 15.

(e) Hold the wrist a trifle lower than the knuckles, as in Figs. 12 and 15.

(f) Strike each key with a sharp clear movement

of the finger, with a firm touch, the point of contact in key-depression being the ball of the finger as in Fig. 16.

(g) Do not press the key after it has once been depressed. Keep the key depressed (if necessary) by resting the weight of the arm upon the key.

(h) Raise each finger as soon as its mission has been fulfilled.

(i) Hold the elbows out and away from the body as in Figs. 8, 9 and 10, and in doing so do not raise the shoulders as in Figs. 1, 2 and 3.

(j) Always play in as straight a line as possible upon the keyboard. When transposing, and few black keys are to be used, play in a straight line near the edge of the white keys as in Fig. 18, gradually working your way to the black key. That is, play each succeeding note nearer and nearer to the black key. In this way when the time comes to strike the black key, the finger is in a position to strike it without any extra effort. Then gradually work your way back again, reversing the procedure. Do not make a sudden jerky motion toward the black key and then back again.

(k) Always play in as straight a line as possible upon the keyboard. When many black keys are to be played upon, play upon and in between them as in Fig. 19.

Fig. 18

53. To Acquire Mastery of the Keyboard.

As will be noticed, all the etudes are written in the key of C Major. After one has mastered all the etudes and can play them with great velocity, he feels totally lost when called upon to transpose into the other keys. To play the piano proficiently one must be just as much at home and at ease between the black keys as he is upon the white ones. One must be the master of the whole keyboard and not in the key of C Major alone. To be a real master of the keyboard one must master it from every angle.

54. Work Brings Progress.

The student should observe and compel himself to

Fig. 19

adhere rigidly to the rules laid down. *Determination to master, with grit and work along the right lines, will make a master of anyone.* The writer has learned from his experience that every pupil he has ever taught was capable of making and did make far greater progress than the pupil himself thought possible. Such progress is only possible through work, the right kind of work along the right channels. So WORK.

55. Mastering All the Keys.

In playing the sharp and flat keys, it is essential to persist in acquiring the ability to play right in between the black keys. Do not shift the hand in and out in a zigzag fashion, from the white keys to the black ones

and then back to the white ones. Play in a straight line and avoid every unnecessary motion. When few black keys are to be used play in a straight line nearer the edge of the keyboard as in Fig. 18. When many black keys are to be used, play on and in between them as in Fig. 19.

56. Fingers Must Be Trained to Play Between Black Keys.

It has been the writer's experience in teaching this manner of playing, to see students strike three keys at the same time. Their fingers were so stout and more often clumsy that they not only struck the key aimed at but pulled down with it the two adjacent black keys. The writer discovered that the students produced the three tones more because the fingers were not developed for such playing than for any other reason. Continued practice, however, proved that even with stout fingers one can manipulate between the black keys without difficulty.

To make the student thoroughly familiar with the whole keyboard, the writer has arranged a series of exercises in all keys. These exercises are designed to develop facility in playing between the black keys. To play them with a minimum of effort it is best to keep the hands in the position as shown in Fig. 19. (See Weight and Relaxation Exercises by the writer.)

It is well, also, to practice each of the etudes in all the keys as outlined. Only the first two measures of the

first etude have been written out for the guidance of the student.

57. Raising the Fingers Is Beneficial.

One good feature of this manner of playing is that aside from eliminating unnecessary motions and conserving energy, it helps to develop strong fingers by compelling the student to raise his fingers over the black keys in clearing them.

CHAPTER VII.

FINGER ACTION

58. Finger Action, Touch Can Be Taught.

Since all playing is done through the direct agency of the fingers, we must analyze finger action and point out that action which is conducive to the most sympathetic and sonorous tone. Results are the all-important thing desired. The piano is one of the most sensitive instruments; every touch or difference in the manner of touch shows itself clearly by the difference in the quality of tone produced.

It has been commonly believed that touch can not be taught. Touch *can* be taught, but, first it must be understood, fully and completely, and then explained so that all may understand.

59. Point of Contact in Key Depression Is Ball of Finger.

It has been found that to acquire a deep, sonorous, full, and resonant tone which is singing and velvety, the point of contact in key depression should be the BALL of the finger as in Fig. 16. By developing with it a free-arm movement and weight playing, one can be assured of a touch that will produce only a beautiful, sympathetic tone.

60. Tone, Development of Touch.

To develop this touch, carefully observe the following points while practicing the etudes as prepared by the writer:

(a) Hold the hands over the keys as in Figs. 13 and 17, in a normal or natural position, free from strain. See Fig. 6.

(b) With a quiet hand let the finger fall upon the key (let this action take place without changing the curve of the finger as in Figs. 15 and 16). Strive to have the finger action visibly begin at the knuckles. If one plays with relaxed muscular action there will be a slight arm movement which, though very essential, is hardly noticeable.

(c) Develop the playing muscles so that the fingers strike the keys with the full weight of the arms.

(d) Continue this development to such a fine degree that the playing muscles work correctly even without conscious effort. When one has developed his playing muscles to such an extent

that they work correctly even without conscious effort, he will have a most wonderful touch.

61. Touch, for Brilliant Rapid Passages.

It should be the player's greatest care to master that touch in which the point of contact is the ball of the finger. In brilliant and rapid passages nature takes care of the point of contact, in which case the point of contact is the tip of the finger as in Fig. 20. In raising and

Fig. 20

lowering the fingers with great velocity, the playing muscles work so rapidly that they cause the fingers to round more than they do when the fingers work slowly. It is this action which causes the fingers to strike upon the tips in rapid passages, in which case there is a rapid blow. In other words, it is not necessary to practice this manner of finger action.

62. Acquisition of Beautiful Tone.

But considerable time should be spent in slow, even, legato playing with a beautiful melody tone, which can be acquired only by insisting that the point of contact in key depression shall be the ball of the finger, and by proper stroke visibly beginning at the knuckles and having with it a slight arm movement. Striking the key, with the point of contact at the tip of the finger, produces a brilliant sharp tone of little carrying power.

63. Avoid Stiffening of Muscles.

Among students, one finds so many who curl and cramp their hands and fingers as in Figs. 21 to 25. Holding the hands and fingers in such cramped positions leads to weak, uneven, and dry playing. In fact, it is a question whether, with such positions, any amount of practice will enable one to execute rapid passages brilliantly and with any degree of ease, in which each note is heard clearly and distinctly. Maintaining positions as displayed by those figures causes cramped, stiff hands and fingers and produces a hard, harsh, and uneven tone.

64. Curled Fingers and Cramped Hands.

Hindrances caused by maintaining position as shown in Fig. 21:

(a) Curled fingers and cramped hands retard the action of the playing muscles, because a load is placed upon them before they cause the fingers to strike. See Fig. 7.

(b) To curl the fingers and cramp the hands requires

energy. Since it is not necessary to maintain this position to get the best results, this energy is wasted. It is essential to conserve our energy and to use it when needed.

Fig. 21

(c) With curled fingers and cramped hands, one can not apply the full weight of his arms upon the ball of the finger. The point of contact in this position is the nail of the finger.

(d) Playing with curled fingers will cause the listener to hear the sound of the clicking nail above the sound of the vibrating string. These sounds are superfluous and annoying.

65. Straight Fingers, Stiffness.

Hindrances caused by maintaining a position as shown in Fig. 22:

(a) Holding the fingers straight is unnatural and

Fig. 22

stiff. Stiff playing produces hard, harsh, uninteresting, or weak tones.

(b) The hand tires quickly.

(c) It is impossible to play rapid passages, because one is obliged to move the hand with an up-and-down movement for each key depression.

(d) The full weight of the arms cannot be applied to the fingers when playing in that position.

(e) This movement consumes time and energy most of which is wasted. Hold the hand and fingers out straight when standing with the arms hanging loosely from the shoulders and notice how much energy is necessary to hold the fingers in this position.

66. Curled Fingers.

Hindrances caused by maintaining a position as shown in Fig. 23:

(a) Too much time and energy are consumed and

wasted in raising the fingers so high and curling them. See Fig. 7.

(b) All unnecessary movements must be eliminated. One does not realize how much time is uselessly wasted by following such methods until he has eliminated them. Only after he has eliminated the wasted energy can he find himself with more surety, more firmness, and with greater velocity, and producing a more sonorous tone.

(c) Curling the fingers is unnatural.

Fig. 23

67. Stiff Hand Positions Must Be Avoided.

It is not necessary to prove that maintaining positions as displayed by Figs. 24 and 25 are incorrect; that is self-evident. Holding the hands in either of these ways produces stiff playing muscles. To get the best results, one must maintain relaxed muscular action at all times.

Fig. 24

Fig. 25

68. Avoid Continued Pressure Upon the Keys.

One often sees performers holding their hands over the keys as in Fig. 26, and shaking their hands to and fro on the key which has been depressed, and pressing or squeezing it after the tone has already been produced.

The writer can not impress too strongly upon the mind of the student that energy must be conserved and that every movement which is unnecessary must be eliminated, *as that energy has been wasted.* It is hard enough to acquire the mastery of the keyboard without wasting so vast an amount of energy.

Fig. 26

It is too late to apply pressure upon the key after the tone has already been sounded, because the hammer strikes the string and falls back before the key touches bottom. It seems quite a common fault to continue pressing the key after the tone has been produced. Nothing can be added or detracted from the quantity or quality of the tone after the hammer has left the string. Let the weight of the arm keep the key depressed for the full value of the note.

69. Practice Develops Correct Finger Action.

Now that the various touches have been explained, and the good and bad features pointed out, it is hoped that the student in going through the etudes prepared by the writer will strive unceasingly to master that touch in which the point of contact is the BALL of the finger and that he will strengthen his playing muscles by raising his fingers high and striking the keys with a clear, decided, and firm finger action that will produce a firm, sonorous, and appealing tone.

CHAPTER VIII.

WEIGHT PLAYING—STACCATO

70. Importance of Weight Playing.

The Weight and Relaxation method of playing is the only method to pursue to achieve the greatest possible results. It is only through weight and relaxation that one can attain that quality and quantity of tone that differentiates the artist from the ordinary performer. The student should do all in his power to master that method and to control his playing muscles to such an extent that they will work properly, even without conscious effort. It is only when his playing muscles are under absolute control that he can hope to apply artistic interpretation to a composition.

We have learned that relaxation conserves our energy and that weight produces exquisite quality and every degree of quantity of tone. We have explained the means

of mastering relaxation; let us consider now the means of mastering the principle of weight playing.

71. Adaptability of Staccato Playing.

Staccato playing is exceptionally adaptable as a means of attaining the mastery of the principle of weight playing. By practicing the etudes with all the staccato variations, as prepared by the writer, in the proper way, one can attain a remarkable degree of proficiency in weight and relaxation playing. Because, in staccato, we must employ the full weight of the arms, together with a free-arm movement to get the most desirable results.

72. Methods of Playing Staccato.

There is essentially only one method of playing staccato and that is by employing the whole arm from the tip of the finger to the shoulder. But different passages, to produce the desired effects, require different forms of treatment of details; for example, staccato in chord playing would require a movement different from staccato in rapid octave passages. These, in turn, would have to be different from dainty and graceful single-note passages.

Though there is a whole-arm movement in every form of staccato playing, yet it can be divided into three classes, which are:

(a) That class in which the *whole arm* movement is *predominant,* with firm, though supple, wrists and fingers, mainly for chord playing where great quantity as well as exquisite quality of tone is essential.

(b) That class in which the *forearm* movement is *predominant,* with supple wrists and firm fingers, for rapid octave-staccato passages.

(c) That class in which the *finger action* is *predominant,* with relatively quiet upper arm and forearm, for dainty and graceful staccato passages.

73. Strong Co-ordination of Muscular Movements Necessary.

It should be remembered, however, that **in no class is the movement isolated to that particular part of the arm.** Even in the forearm-staccato or in finger staccato the **whole arm acts.** In other words, there must be a very decided and strong co-ordination among all the playing muscles. Try to isolate any set of muscles, and the result will be stiff playing, which must be guarded against.

It is best in first learning staccato playing to master the whole-arm movement, and after that movement is under one's complete control, to master in turn the movements in which the forearm movement and finger action is predominant.

74. Necessity of Mastering Staccato Playing.

Staccato is a very important factor in the mastery of the keyboard. The staccato studies (as arranged by the writer) with all the variations practiced correctly will develop:

(a) Ability to play with relaxation.

(b) The strongest possible co-ordination among all the playing muscles.

(c) Ability to produce every degree of quantity and exquisite quality of tone through the mastery of the principle of *weight playing*.

(d) A sense of space.

(e) Firm, though supple joints at the wrists, knuckles and fingers.

(f) Strong playing muscles.

(g) Ability to play legato with more smoothness, with greater freedom, and with the attending exquisite quality of tone that freedom and smoothness produce.

75. Mastery of Staccato, Whole-Arm Movements.

To acquire the above results, practice the staccato studies observing the following, for whole arm staccato:

(a) Sit firmly at the piano, shoulder muscles relaxed, arms in a hanging position, and hands in a natural playing position as in Figs. 13 and 17.

(b) Raise the whole arm, with as little muscular effort as possible, until the fingers are between three and five inches above the keys to be struck, as in Fig. 27. Notice the height of the fingers above the keys, then notice the position of the elbow and also of the cuff of the sleeve. In this movement the greatest part of the motion is made at the shoulder, the whole arm, hand and fingers accompanying that motion. There must be some movement at the elbow,

Fig. 27

wrist and fingers, for without it playing would be stiff. All joints must be supple.

(c) Without ceasing to retain firm wrists and fingers, release all tension from the shoulder muscles allowing the arms to fall, with the full weight of the arms and with the fingers upon the keys. If this movement is properly consummated, the arm will fall like so much free weight upon the keys. It is the ability to raise the arms and then to let them fall with a free-arm movement, that must be developed.

(d) In playing staccato, do not allow the hands to fall upon the keys and then to rebound with a jerky motion as though one were testing to see how hot a stove was. Such action will cause a stiffening of the shoulder muscles which will cause a hard, harsh, or weak tone of little carrying power, besides retarding muscular action. Allow the hands to *fall upon the keys and rest there with the full weight,* as though one were resting his hands in his lap.

(e) Avoid raising the shoulders as in Fig. 3, or stiffening the fingers as in Figs. 21 to 25. These are common faults displayed when first attempting to master the staccato movement. *The player in becoming conscious of a movement that should be natural, generally stiffens his muscles and does exactly the things he is trying to avoid.* It should be every student's aim

to be conscious of every movement he desires to execute and still be natural in his playing movements.

(f) Make no unnecessary motions in playing staccato. In other words do not shake (raise and lower) the hand over each key before striking it. (See Figs. 30 and 31.) This movement consumes energy and must be avoided. It is impossible to apply the principle of weight playing in this manner of execution because all the energy generated by the weight of the falling arms has been spent by the abrupt changing of the direction of the movement of the arms. By the time the player is ready to strike the keys, the fingers are so close to the keys that pressure must be applied to depress them. There must be only one motion for each key depression. The arm must be permitted to fall with the full-arm weight at the first attempt, the point of contact in key-depression should be the *ball* of the finger as in Fig. 16.

(g) Avoid playing with an up and down motion of the forearm alone, while holding the upper arm firmly and closely to the side. Playing in this manner will cause stiff muscular movements.

(h) Avoid playing with an up and down motion at the wrist alone (shaking the hand over the keys, see Figs. 30 and 31, while holding the upper-arm and forearm almost motionless. Such

playing causes stiff muscular movements and retards progress.

(i) The student will experience a pain in his finger tips when first practicing this staccato movement. This pain is caused by the constant falling of the arm upon the keys, and the point of contact in key-depression being the ball of the finger as in Fig. 16. Do not be discouraged by this pain. Continue to practice this movement in spite of it. The pain will soon leave and the finger tips will become developed and strong.

76. Mastery of Forearm Staccato.

After one has mastered the whole-arm staccato he should master that class of staccato playing in which the forearm movement is predominant. To master this movement:

(a) As (a) in whole-arm staccato.

(b) Raise the whole arm with as little muscular effort as possible, at the same time bending the arm at the elbow, until the fingers are between three and five inches above the keys to be struck, as in Fig. 28. Compare the height of the fingers above the keys in this case with that in Fig. 27, and notice that there is practically no difference. There is, however, a change in the position of the elbow and the cuff of the sleeve. In this manner half the movement is taken up at the shoulder joint and the other half at the

Fig. 28

elbow joint, thus enabling the performer to acquire greater facility for rapid passages.

(c) Reverse the movement as explained above. That is, relax the shoulder and upper arm muscles, permitting the arms to fall, and also allowing the forearm to resume its original position. Again, half the movement is taken up at the shoulder and the other half at the elbow.

(d) As (d) in whole-arm staccato.

(e) As (e) in whole-arm staccato.

(f) As (f) in whole-arm staccato.

(g) As (g) in whole-arm staccato.

(h) As (h) in whole-arm staccato.

(i) As (i) in whole-arm staccato.

77. Mastery of Finger Staccato.

To master that form of staccato playing in which the finger action is predominant is the next problem. In this movement there is a combination of all three, with the exception, of course, that the finger action stands out most prominently. To master this movement:

(a) As (a) in whole-arm staccato.

(b) Raise the whole arm just a trifle, accompanying this motion with a slight bending of the arm at the elbow, all this motion taking place simultaneously with the raising of each finger as in Fig. 29. Compare the height of the fingers above the keys with that in Figs. 27 and 28. Notice that there is very little difference. But observe the position of the elbow and the cuff

Fig. 29

of the sleeve. In this class of staccato playing, part of the movement is made at the shoulder, part is made at the elbow and the rest of the movement is made by the fingers. In this manner three parts of the arm are employed, each making part of the movement. This makes it possible for the performer to complete the whole movement in about one-sixth the time required if there were but a single movement. Mastery of this movement will mean greater skill and facility in executing rapid finger-staccato passages.

(c) In striking the key, reverse the movement herein explained, but observe all the rules laid down.

(d) As (d) in whole-arm staccato.

(e) As (e) in whole-arm staccato.

(f) As (f) in whole-arm staccato.

(g) As (g) in whole-arm staccato.

(h) As (h) in whole-arm staccato.

(i) As (i) in whole-arm staccato.

78. Staccato Essentially a Whole-Arm Movement.

Again we say, it must be remembered that in **no class** of staccato playing is the movement **isolated to that particular class.** It is always essentially a whole-arm movement and with every stroke whether whole-arm, forearm, or finger action, it is the weight of the **whole arm** that produces the tone.

Fig. 30

79. Wrist Movement in Staccato Playing Is Incidental.

There is no such thing as wrist movement, in itself, in piano playing. The writer has often seen students practicing this movement by holding their arms and

Fig. 31

forearms almost still and moving their hands at the wrist in an up-and-down motion. See Figs. 30 and 31. This theory of wrist movement has long been exploded.

If one should watch an artist playing, and analyze the motion, he will find that though there is somewhat of a movement at the wrist, it is not essentially a wrist movement. It is only an accompanying movement of the whole arm or forearm. The joint at the wrist being supple, it naturally moves with every motion of the arm. This wrist movement, therefore, need not be practiced, as it is a natural movement. That is, the slight movement that takes place is incidental to the arm movement.

80. Necessity for Developing Sense of Space.

A sense of space must be developed. That is, the student must develop a sense that will enable him to raise his hands away from the keys, get his fingers into playing position right over the next group of keys to be played and then allow his hands to fall upon them without looking to see if he has jumped too far or not far enough.

It is just as important for a pianist as it is for a violinist to develop this sense of space. It would, indeed, be a sorry sight to see a soloist trying out several tones before he begins his solo or before playing an important note. The soloist must put his finger in the right place at the first attempt. So it is with a pianist. He must be able to sense the distance from one key to the next and strike it at his first attempt fully and squarely, and produce a tone of the desired quantity and quality.

81. Means of Developing Sense of Space.

Staccato is an excellent means of developing this sense, and for that reason, great care should be taken in mastering this touch. In mastering the sense of space:

(a) It is advisable to raise the hands as high as has been suggested, in the three classes of staccato movements, so that the arms, hands and fingers will become accustomed to being away from the keys. Break away from the habit of keeping the hands and fingers glued to the keys.

(b) Keep the eyes upon the music and not upon the keys in developing this sense. It must be remembered that the hand is quicker than the eye. Under no condition can the eye observe each and every key before the finger strikes it. Since the eye is not quick enough to locate the correct key in advance of its being struck, why confuse it by looking first at the music, then at the keys and hands? Why tax the eyes with watching three places when it isn't necessary to look in more than one?

(c) At first many wrong keys will be struck, but do not be discouraged. All attention should be concentrated upon correct arm, hand, and finger movements. *The ear will take care of incorrect notes, and call attention to the player, but not so with incorrect arm movements.* We must concentrate and keep constant watch on our movements to see that they are correct and natural.

82. Necessity for Strong, Firm, though Supple Joints.

For clear playing the joints at the wrist, knuckles and fingers must be firm. Weak joints will bend under the weight of the arm and cause the tones to be blurred, besides being weak and of little carrying power and of practically no musical value.

83. Means of Developing Strong Joints.

Staccato practice will strengthen these joints. That is, correct application of the principles as outlined in the early part of this chapter, will eventually develop strong firm joints. To develop firm, though supple, joints:

(a) Practice the staccato studies, as prepared by the writer, with the whole-arm staccato movement.

(b) Permit the arm to fall with its full free weight, the point of contact in key-depression being the ball of the finger, as in Fig. 16.

(c) Do not permit the joints to bend under the weight of the arm, especially the knuckle joint of the fourth finger of the left hand. This finger will be found to be the weakest of all. The best method for strengthening it is to practice that staccato variation in which the right hand plays legato and left hand plays staccato.

This joint, being the weakest, is unable to withstand the weight of the arm at the beginning, and will bend and cause ineffective playing. Practicing the exercise as explained above will cause a slight pain in the knuckle joint of this finger. But do not be discouraged. Prac-

tice on regardless of the pain. That will soon disappear and leave behind it a strong, firm, though supple, joint.

84. Muscle Development.

Strong playing muscles are developed by correct staccato study. Arm-staccato or any other class of staccato produced with full, free weight of the arms, and the movements taking place at the shoulder, will develop the muscles in the back and chest as well as the shoulder, upper arm, forearm and hand muscles. In fact, almost every muscle in the body is at work in correct piano playing. Develop a strong co-ordination among all playing muscles.

Since strong muscular action is essential to the best results in piano playing, one should do all in his power to strengthen his muscles as much as possible, and staccato playing is an excellent means toward that end.

85. Execution of Grace Notes Simple.

Playing grace notes is as simple of execution as any other style of playing, if the arm movement in executing the tones to be produced is correct. What may be considered proper execution of grace notes? That manner of execution is proper and correct in which the energy expended is the minimum necessary to attain the best possible results.

86. Method of Executing Grace Notes.

To play grace notes with a minimum of effort:

(a) Raise the arm and forearm (as explained in

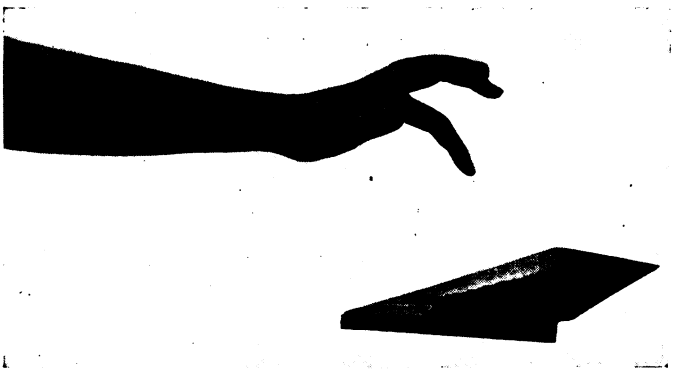

Fig. 32

staccato playing) with the playing fingers directly over the keys to be struck, arranging the fingers in their playing position as in Figs. 32 and 33.

Fig. 33

(b) Hold the hand and fingers firmly, though relaxed. The finger that plays the grace note should be held considerably lower than the finger that plays the main note, as in Figs. 32 and 33.

(c) Holding the fingers in this position, let the arm fall with the fingers striking the predetermined keys. Naturally the finger that is held lowest will strike the key first and the finger prepared to strike the main note will follow.

(d) Do not hold the finger that is to play the grace note too firmly. It should be so relaxed that the hand will not rest after playing the grace note, but instead will continue in its downward motion until the finger that is to play the main note has fulfilled its mission. Of course, this whole movement must be a rapid one and must take place in the single downward motion of the arm.

87. Elimination of Unnecessary Motion.

The advantage of playing grace notes in this manner, is that one plays both notes with a single arm movement. This gives the performer so much more time to place and arrange his fingers in position to strike the next keys.

Such elimination of motion puts the player at greater ease because he does not have to hurry. Muscle tension always follows hurrying, which includes hard, harsh, or weak tones of little carrying power or musical worth.

The only playing worth listening to, is that soft, velvety, round playing that can be produced only by the use of arm weight and relaxed muscular movements.

88. Staccato, Most Important in Piano Study.

In all, staccato playing is the most important touch that must be developed and mastered. After one has mastered weight and relaxation playing in staccato study, he will experience little trouble in developing the same principle in his legato playing. He will find the weight of his arms just resting upon the tips of his fingers, and it will be only through arm-weight that tone will be produced.

89. Weight Playing, Legato.

After one has mastered weight playing in staccato practice, the mastery of the same principle in legato practice will follow. Continued development of relaxed muscular movements with free-arm weight will enhance the freedom required in all playing and make exquisite quality of tone possible.

In staccato the weight of the whole arm is brought to bear, with a well defined motion, for each key-depression. That is, the whole arm is raised and permitted to fall with a separate motion for each note to be played. On the other hand, in legato playing the weight of the whole arm remains resting or balanced upon the keys for the whole phrase or section that is to be played legato. How, then, can the weight of the whole arm be applied to each note of a passage to be played legato?

90. Transfer of Weight.

This question can best be answered by explaining the *Principle of Transfer of Weight* and then mastering that principle. This principle must be mastered, for it is only through weight and relaxation that one can attain that quantity and quality of tone that is supreme from an artistic standpoint. No effort should be spared in its mastery.

In smooth even legato playing the performer must apply the weight of his arms as in staccato playing for the first note of the phrase and then transfer the weight of his arms from one finger to another until the whole phrase is completed when a new start is made by raising the arms, hands, and fingers from the keys and permitting them to fall again for the first note of the next phrase. The student must develop correct finger action and arm movements for legato playing to such an extent that his playing muscles will work correctly even without conscious effort.

91. Mastering the Principle of Transfer of Weight.

To master the principle of transfer of weight:

(a) In playing the first note of a phrase, permit the arms, hands, and fingers to fall upon the keys, as in staccato playing, with free-arm weight, the point of contact being the ball of the finger as in Fig. 16.

(b) Instead of raising the arm, hand, and fingers above the keys in preparing to depress the next

keys as in staccato, continue to keep the key depressed for its full value by simply resting the weight of the finger upon it and *balancing the weight of the whole arm at the shoulder.*

(c) In depressing the next key to be played, transfer the weight of the arm to the finger that is to play the next note keeping the first key depressed until the second note has been sounded and its key depressed the full distance. Permit the first key to rise as soon as both keys have met at the keybed as in Fig. 34.

Fig. 34

(d) After the second note has been struck with the full free-weight of the arm, again *balance the weight of the arm at the shoulder* and continue to keep the second key depressed by the mere weight of the finger itself. When the next finger has fully depressed the third key, permit the second key to rise.

(e) Continue this procedure for each succeeding note of the legato passage.

(f) This method of procedure will cause the avoidance of continued pressure upon the keys after the tone has been sounded, which action is an unnecessary and avoidable waste of energy.

(g) In transferring the weight from one finger to another, one key should not be permitted to rise until the next one has been sounded and the key fully depressed so that the tones overlap just the least bit. *It is the ability to make all the tones overlap in the right proportion that makes for smooth even legato playing.* Overlapping of tones to too great an extent will cause blurred playing. Non-overlapping of tones will cause portamento or staccato playing.

(h) In depressing the keys as explained above, we see in Fig. 34 that **B** has been depressed and kept depressed until **C** has been fully depressed. In its turn **C** will have to remain fully depressed to meet **D** at the bottom. This procedure in short is that which must be followed in legato playing. In other words every two adjacent notes to be played legato must have their respective keys meet at the keybed.

Chapter IX.

ACCENTS

92. Importance of Accents.

Accentuation holds a decidedly prominent place in music. The spirit of the music depends upon it, for without it the playing of a composition is devoid of life. Considerable study should be applied to acquiring the ability to accent properly.

93. The Functions of Accents.

The main functions of accents are:

(a) To make the melody stand out clearly.

(b) To indicate the phrasing of a composition. All groupings must be marked by accents as the listener is entirely dependent upon his ear. In rapid playing it is impossible to think each note separately.

(c) To indicate the characteristics of the different styles of compositions.

(d) To mark the rhythm of a composition.

94. Ability to Accent Is Necessary.

Much can be said about *why* and *where* to accent, but when one does not know *how* to accent, all the knowledge of their aims, purposes, and even the where to accent will be of no avail. *Accenting is* a question of *technical facility to play important or melody notes stronger and make them stand out above those less important.*

It is useless to know where to accent and then to lack the technical facility to make the important notes stand out clearly. A strong mind must have a strong body to get the best results.

95. Method of Execution.

In practicing the accent variations, as prepared by the writer it is well to exaggerate every movement. That is, play the accented notes as strongly as possible and the unaccented notes as softly as possible. In raising the fingers, raise them as high as possible, but not at the expense of relaxation. Remember that fingers held arched as in Figs. 11 to 17 can be nothing but relaxed. So it is well always to pay strict attention to holding the fingers arched.

96. Points to Remember in Accenting.

The following points should be remembered in practicing the accent variations:

(a) Practice very slowly, allowing at least one beat to each note.

(b) Raise the fingers high and strike the key with

a clear, firm touch, using the full weight of the arm with each stroke of each finger.

(c) In playing the accented note, throw the finger with full arm weight, with the necessary free-arm movement and with a minimum of energy, the point of contact in key-depression being the ball of the finger as in Fig. 16.

(d) Do not be satisfied with the quantity of tone produced until you feel that it is impossible to get more tone out of the piano.

(e) Do not be satisfied with the quality of tone produced until the tone produced is resonant, full and round, though strong and firm.

(f) In allowing the full weight of the arm to fall, do not bend the fingers or curl them or strike on the nail of the fingers as in Figs. 21 to 25.

97. Importance of Accenting Strongly.

One can not accent too strongly and firmly in practicing these variations because with strong, firm fingers and correct finger action one can play in any degree, from the daintiest **ppp** to the strongest **fff**, but not so with weak fingers and poor finger action.

The accent variations, aside from helping one to acquire the technical facility to make important notes stand out clearly, serves to:

(a) Develop independence of the fingers, as they require special effort from one finger in a group while the others in the same group play softly.

(b) Develop independence of the arms by having

varied accents in one hand while the other hand plays with no accents.

(c) Develop a rhythmic sense.

(d) Develop the power to shade a passage evenly and gradually and with ease; in other words, to be a master of dynamics.

(e) Develop power or ability to concentrate.

98. Acquisition of Artistic Accentuation.

After one has mastered, or acquired the ability to accent, or in other words, learned the *how to accent* he should acquire the knowledge of *when and where* to accent, at the same time mastering the different degrees or shades of accents.

Moderate and gentle accentuation is more artistic and effective than strong violent emphasis. It would be better to omit an accent altogether than to exaggerate it too greatly. Of course, there are exceptions to the rule. There are times when decided accents are perfectly in place, for example when the composer expressly calls for **sf** or **rfs.**

99. Degrees of Accent.

The degree of accent, as a rule, should not surpass the unaccented notes by more than one degree of strength.

In **ppp** playing the accent should not exceed **pp**
" **pp** " " " " " " **p**
" **p** " " " " " " **mp or mf**
" **mp** " " " " " " **mf or f**
" **mf** " " " " " " **f**
" **f** " " " " " " **ff**

And in **ff** playing there should still be left enough reserve power for accentuation. It is for this reason that the writer advises the student to practice the accent variations with strong and decided accentuation. *It is easier to play softly with strong fingers than to play strongly with weak fingers.*

100. Independence of Arms, Hands, and Fingers.

To be a proficient performer one must have two right hands. That is, the left hand must be equal to any task that may arise, just as the right hand must be. It is every student's duty to develop both hands equally and make them each independent of the other. The accent variations is a means toward that end.

Just as one's hands must be independent of each other, so must the fingers and arms be independent of each other. One must be prepared to carry a melody along from one hand to the other and always hold the accompaniment in the background, or more difficult still, to transfer the melody from one finger to the other in the same hand and with the same hand still play an accompaniment, always holding the accompaniment in the background.

This task is not so difficult as it may at first appear, providing one's fingers are developed and independent. The accent and staccato variations, as prepared by the writer, will help very much toward the development of this power. Another set of variations, for the development of independent arms, is excellent for the development of independence of the arms, hands, and fingers.

101. To Develop Independence.

By practicing **ff** and **pp** and changing from hand to hand and from measure to measure:

(a) The arms will acquire independence of movement and could be called upon to execute any degree of strength by either hand at any time.

(b) One will be on the way toward the mastery of dynamics in music.

102. Dynamics.

When one has so mastered the principles of Weight and Relaxation playing, with the attending independence in arm, hand, and finger movements, that he has complete control over his playing muscles to consummate any movement with a minimum of effort; when one has developed the physical strength of his playing muscles to such a degree of perfection that he can call upon them to execute any nuance or dynamics in music; and when one uses his abilities properly, he surely will be in the class known as *true artists.*

Dry technic, or ability to play the greatest number of notes in the shortest space of time, will, at best, make an uninteresting and monotonous performance. It is the dynamic degrees artistically placed that makes the melody shine out and deliver the message in a manner that will appeal to the audience. A theme should stand out prominently from any accompaniment that may be woven around it.

103. Dynamic Shades or Degrees.

Dynamics includes the various grades and shades

of strength from **ppp** to **fff.** The principal degrees are:

(a) Pianissimo.
(b) Piano.
(c) Mezzoforte.
(d) Forte.
(e) Fortissimo.

It is the artistic application of these degrees of dynamics applied to music that really constitutes the beauty of musical expression.

104. Determining Dynamic Shadings.

Since no exact rule can be laid down for determining how soft or strong is *piano* or *forte,* it must be left entirely to the performer. He must decide exactly the degree of power he will place upon his conception of *piano* or *forte.* It is his ability to execute the other dynamic degrees in proper proportion to his conception of **p** or **f** that stamps the performance as artistic or mediocre.

It is not so necessary to produce tremendous quantity of tone with each key depression. As has been said before, it is the artistic application of the dynamic degrees in executing a composition that really constitutes the beauty of musical expression and makes it appealing to the listener.

105. Mastery of Dynamic Shadings.

If the student will study the exercises, prepared by the writer, in the following manner he will find his ability to shade in a composition much simplified:

(a) Begin with **ppp** and gradually increase the

volume of each tone (crescendo) with each note.

(b) Continue this movement until half (or the ascending) portion is played. When the end of the ascending portion is reached the volume of tone produced should be **fff**, or as strongly and powerfully as one can play.

(c) In descending begin with **fff** and play each note softer (diminuendo) until the end of the exercise. When the end of the descending portion is reached the volume of tone produced should be **ppp** or as softly as one can possibly play and still be heard.

(d) Practice all the exercises in this manner. In studying compositions it will be found that in most cases where passages are in sequence they increase (crescendo) as they ascend and decrease (diminuendo) as they descend.

(e) It will be well for additional development to reverse the movement as explained in a, b, c, and d, above, and begin with **fff** and decrease (dim.) while ascending and increase (cresc.) while descending.

(f) For still further development, one can practice the different dynamic degrees in each measure.

106. Purposes in Practicing Dynamics Mechanically.

The purposes in practicing the dynamic degrees in a purely mechanical manner are many:

(a) One learns to control his feelings, by being able

to play in any degree or shade and over any length of passage. Otherwise one may lose control of himself and permit his emotion to overdo and in that way spoil and weaken many good points. For artistic interpretation one must be in everlasting control of his emotion.

(b) When one has developed the power to shade a passage evenly, gradually and with ease, he can then take liberties with greater surety and firmness and more conservatively.

(c) Constant use of **ff** or **pp** or any other single degree of shading is ineffective and becomes very monotonous, as it means insufficient variety of tone coloring.

107. Dynamic Effects.

Such is a mechanical application of crescendo and decrescendo (diminuendo). Without the human or artistic element, playing would indeed be mechanical and dry. It is the constant changes that makes the performance of a composition interesting.

Shading or coloring is largely dependent upon one's taste and emotion. To make the performance of a composition interesting:

(a) The dynamic changes should be diversified, natural and correctly adapted to the composition.

(b) Do not play any passage **ff** or with extreme power, unless that melody occurs alone and will not drown another voice of more importance.

108. Concentration.

Few problems are too difficult for the student who can concentrate all his energies upon them. Concentration means, to bring all one's thinking powers to bear upon one central point with the greatest intensity. This power is a very important factor in producing rapid results in piano playing.

109. Necessity for Acquiring Ability to Concentrate.

If one can apply his mind to his work in such a way that his attention is exclusively upon his work, the work will progress rapidly. The student should do his utmost to develop that power, for with it under his control he can achieve more with less effort.

110. Means of Acquiring Ability to Concentrate.

It seems that the best way to master something is to do "that something" so often and so carefully until it is one's own. If that is the case, let us find some exercise that demands absolute concentration and then use it continually.

The writer's variations for the development of the power of concentration can be used to increase that power. Try to play through any one of the exercises in triplets, that is, considering the whole exercise as one passage, disregarding bar lines—and it will be found to be most difficult without absolute concentration. To master these variations:

(a) Concentrate. Be determined that you will be the master of the situation.

(b) Do not let the mind wander when practicing these exercises.

(c) Count aloud, ONE—two—three, giving a decided accent on the one and pronouncing the two and three softly. Accent the first note of the three on the piano at the same time as ONE is pronounced, and play the second and third note softly when two and three are pronounced softly. By counting aloud and strongly with the accented beat one's mental powers help the physical powers in mastering this exercise.

(d) Play very slowly and evenly.

(e) In the second variation, count one—TWO—three and accent on the piano the second note of the triplet. And in the third variation count one—two—THREE and accent the third note of the triplet, and follow out as explained for (c) above when accenting the first note. But always play evenly.

(f) Continue this variation through the entire series of exercises. It will be of great advantage and help toward development of the power of concentration, a sorely needed power.

These variations will also help toward the development of independent hands and fingers and at the same time strengthen them.

Thus we see that accenting holds a very important place in mastering the art of playing the piano. Develop this power to the greatest possible extent and then use that power very conservatively and artistically.

Chapter X.

OCTAVES

111. Conservation of Energy.

In octave playing, as in all other playing, energy must be conserved. The less energy expended in playing, the greater will be the surety and effectiveness. In other words, make no unnecessary motions in playing octaves.

Every motion that is eliminated allows so much more time to prepare for the next note. The more time there is at the player's disposal, the surer he is of finding the correct keys and the more ease is displayed in striking the keys.

112. Eliminate All Unnecessary Motions.

The writer has often noticed students make three and even four motions before striking each octave. They would first bring their hands over the keys, then raise

and let them down several times, or shake, over the keys to be depressed, thus making sure of their aim before striking the keys. By the time they have become sure of their aim they find that too much time has been consumed in shaking the hands, so they become excited and hurry. With all the aiming they often strike the wrong keys.

113. Develop a Sense of Space.

If the performer would develop a sense of space and make only one aim at the keys and strike them at the first attempt, all the time expended in letting the hand rise and fall over the keys unnecessarily would be saved and could be used to better advantage, either to prepare for the next notes at leisure or to develop velocity. One can not develop velocity in octave playing to any great extent and at the same time make unnecessary motions with each octave to be played.

114. Wrist Movement Incidental.

Let us see what is the cure for this evil. What is true in staccato playing is also true here. There is no such thing as wrist movement, in itself, in octave playing. The theory of octave playing from the wrist has long been exploded. It is, therefore, entirely unnecessary to practice this movement. Nature does that without any effort or help on our part and does it better than we can do it, no matter how hard we may try.

Furiously shaking the hands up and down, as shown in Figs. 30 and 31, at the wrist, will not strengthen the

hands for piano playing and will not enable one to play octaves easier. In fact the tone produced through such movements is thin and with little carrying power. The whole-arm movements as explained for staccato playing, which is also used in octave playing, develops a sonorous, velvety tone that carries and is delightful to the ear.

115. There Must Be Firmness Combined with Relaxation.

There must be the proper amount of firmness, or minimum of tension, and strength combined with relaxation. Should the wrist be too firm it would take the form of stiffness, and for that reason it would be objectionable. Should the wrist be too relaxed it would be the cause of slovenly playing. That, too, would be objectionable, as it would mean playing devoid of life and interest.

116. Joints Must Be Strong and Supple.

With strong firm joints at the wrist and fingers, more emphasis can be placed on tones when necessary. One must have strong and firm, though supple, joints to withstand the many shocks caused when the full weight of one's arms are brought to bear upon the piano keys at the finger tips.

117. Method of Execution in Octave Playing.

In playing octaves:

(a) Have absolute control over all playing muscles, employing free-arm movement.

(b) Have the hand as firm as possible, though supple and relaxed.

(c) Have the thumb and 4th and 5th fingers keep

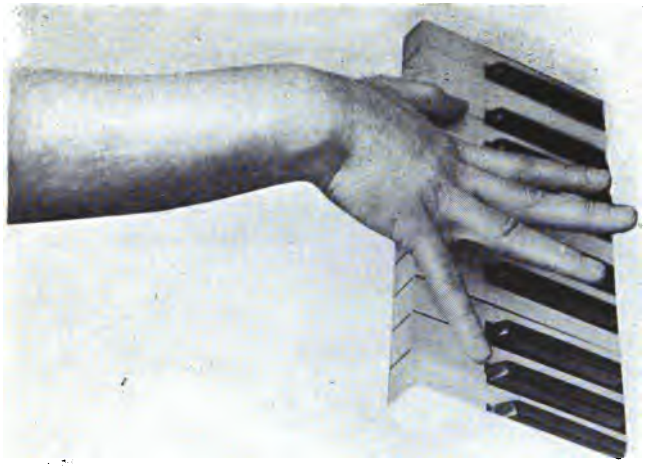

Fig. 35

Fig. 36

the span of the octave, always bearing in mind relaxation.

(d) Do not stiffen the unused fingers by holding them out straight as in Fig. 35.

(e) Raise the arm and forearm, as explained in staccato playing, and prepare for the next octave by bringing the fingers directly over the keys to be struck and then let the arm fall,

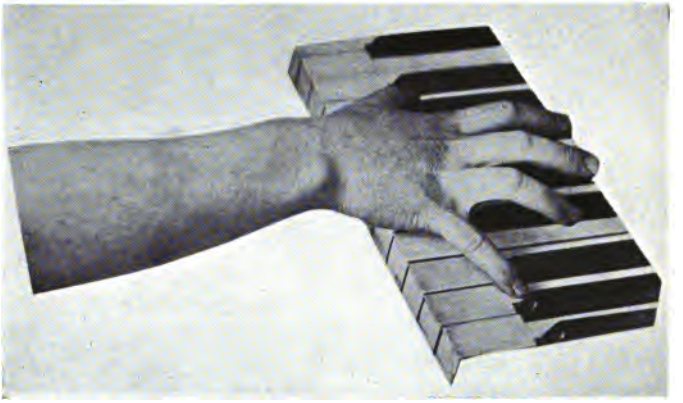

Fig. 37

finger striking squarely upon the keys, with only one movement, employing full-arm weight, as in Fig. 36.

(f) Take care that the knuckles are not forced downward, so that the intervening keys are struck.

(g) In playing chromatic octaves, keep the fingers

as near the edge of the black keys as possible and strike the black keys at the tip, as in Fig. 37.

(h) Play octaves in a straight line on the keyboard, avoiding all unnecessary expenditure of motion and energy.

(j) The fingering of legato octaves depends upon the size of one's hands. Small hands had better employ 5–1 fingers for every octave. Larger hands may employ 4–1 fingers on the black keys and 5–1 fingers upon the white keys.

118. Inspiration, Aspiration, Perspiration.

Now that we have studied and analyzed the essentials in piano playing, it devolves upon the student to work out in practice the principles and rules, as explained in this work. Theoretical knowledge is by no means sufficient in mastering the keyboard. As has been said before, "Piano playing is a very difficult art, and is hard enough to master even under ideal conditions." That is when a student possesses *Inspiration, Aspiration,* and *Perspiration,* the three qualities essential to success. Of the three, perspiration, or ability to keep everlastingly at it, is the most important, for there is no substitute for the necessary hard work.

APPENDIX.

MAXIMS FOR PRACTICE

119. Necessity for Continued Careful Practice.

After one has acquired a thorough theoretical knowledge of the mechanical details in piano playing and has put them into practice; after one has rigorously followed out all the rules and principles, as explained in this work, and mastered them, he should be more than careful lest he lapse into bad habits. One must not only master the correct principles in piano playing but he must continue to practice them carefully and diligently.

For that reason the writer has prepared a list of rules, or maxims, that should be kept in mind for practice purposes. Every student should read the whole list over occasionally, and from time to time examine himself to see which of the rules, or maxims, apply to him. And when he finds any that do, he should memorize them and keep them as a reminder to spur him on to renewed effort and ambition.

120. Slow Practice.

1. Always practice slowly—the slower the better. Practice so slowly that the following points can be easily mastered:
   (a) Correct fingering.
   (b) Artistic phrasing.
   (c) Exquisite quality of tone.
   (d) Correct finger action.
   (e) Artistic dynamic effects.
2. Practice so slowly that each note can be played as firmly as possible with correct muscular action.
3. Practice so slowly that the whole composition can be played through in an even tempo. The simple passages should be as slow as the difficult ones.
4. Practice so slowly that each muscular action may be determined before being made.
5. Practice so slowly that conscious attention may be given to each note before it is played.
6. Practice so slowly that correct muscular habits may be formed.
7. Practice the lesson thoroughly before trying to play it in tempo. Speed is the result of familiarity with the composition.
8. Practice in strict time, giving to each note its full value. Do not play in constantly accelerating tempo until something happens that will force a halt.
9. Analyze the natural playing position, then develop the playing muscles to work consciously in the proper and natural way and finally continue that

development to such a high degree of perfection that they will work correctly without conscious effort.

121. Mastery of Difficult Passages.

10. To master a difficult passage isolate it for practice:
11. Repeat it many times.
    (a) Slowly at first.
    (b) Then **pp** and **ff.**
    (c) Increase the tempo until it can be played correctly and faster than the necessary tempo.
12. Acts of muscular skill should be reduced to a habit and then no deviation should be permitted.
13. Direct all attention on quality of work done. Correct movements and finger action eliminate unnecessary expenditure of effort.
14. In mastering a difficult passage find another arrangement that exaggerates the difficulty and make an exercise of it—then practice the exercise.
15. Practice daily the difficult passages of compositions which have not come up to a general level of excellence of the rest of the composition.
16. It is often better to memorize a piece before thoroughly learning it. This is particularly advisable in studying difficult passages.

122. Concentration.

17. The mind must govern all muscular motions.
18. Do not let the mind wander while practicing or solo

playing. Concentrate every moment of your practice period.

19. Do not look out of the window or watch the clock while practicing.
20. It is useless to expect to master any passage which remains a puzzle to the mind.

123. Fingering.

21. Determine upon one fingering and do not permit yourself to employ another.
22. Don't be afraid to make mistakes. Experience is the best teacher.
23. The object of good fingering is to facilitate performance. That fingering is best which makes the performance of any passage easiest.
24. A difficult passage can be tried with several fingerings till the player decides which is the most suited to him.
25. Don't depend upon your instructor to do all your fingering. Study your individual needs under his supervision.
26. Don't hesitate to be original when once you understand the principles of correct fingering.
27. Don't endeavor to do with one hand what may be simpler and more practical to do with two.
28. Don't consider any passage too difficult until you have given consideration to the fingering.
29. Don't use complicated fingering. Simplicity in fingering is the keynote of a faultless technic.
30. Don't attempt the use of an unsuitable fingering for

your hand, simply because a famous editor marked it.

31. Don't shift the hand from position to position when it is possible for it to remain stationary.
32. Don't confine yourself to the use of the stronger fingers, but strengthen the muscles governing the weaker ones.
33. Don't avoid using the thumb on the black keys. Constantly cultivate its use.

124. Accentuation.

34. Use **f** in practice. It aids accuracy. If one hears a false note played loudly it is more apt to be corrected than when one glides over it simply and lightly.
35. All **pp** passages should be practiced **ff** for surety and evenness of tone; also with varying degrees of tone.
36. Clearness and firmness are acquired by practicing strongly and firmly.
37. Articulate sharply.
38. Rapid progress is dependent upon solid technic and quick perception.

125. Miscellaneous.

39. Read at least one piece of new music every day.
40. One ceases to improve when he arrives at a point in his studies which satisfies him.
41. "Abandon" is something quite different from carelessness in piano playing. It pertains to that un-

consciousness of technical effort which only comes to the artist after years of practice.

42. Plunge right in at the start with some brilliant or difficult selection, so as to break the ice and overcome the tendency to timidity which appears to hamper most pianists.
43. Maintain a correct and comfortable playing position while at the keyboard.
44. Write out for your teacher any questions which have come to your mind since your last lesson. He will appreciate your interest.
45. Listen attentively to your teacher's explanations. If you don't understand them tell him so.
46. Cultivate surety in your playing by eliminating every unnecessary motion.
47. To acquire surety in chord skips:
    (a) Practice two chords at a time and repeat those two chords until they become easy.
    (b) Practice the 2d and 3d chords in the same manner. And then the 3d and 4th chords.
    (c) Then combine all four chords.
    (d) Continue by this method until all the chords are easy of execution.
48. Play with both hands simultaneously and not one after the other. Both hands must play as one.
49. Perform as often as possible for your friends. It is a good means:
    (a) To acquire confidence.
    (b) To overcome nervousness.

50. The three greatest factors that are essential to all success are:

(a) Practice.

(b) More practice.

(c) Still more practice.

If one had only to wish for success to achieve it, there would be little joy in succeeding. It is the fact that only those above the average succeed that makes success so desirable and stamps the successful student as an exception. Anybody can be among the average.

It is assumed that those taking this work seriously hope to be above the average, so to them the writer restates what he has already said,

ASPIRE — PERSPIRE — ACHIEVE.

Finis.

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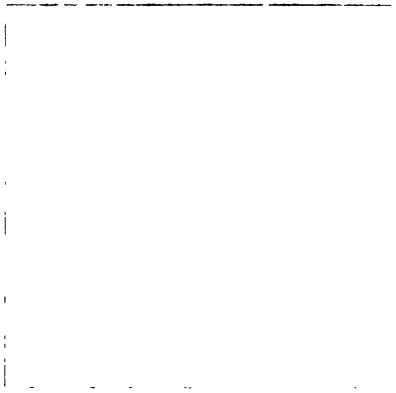

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